REMARKS

Claims 1-19, 22-25, 27-30 and 38-40 were pending prior to entry of this amendment.

By virtue of this response, Claims 1-3, 5, 14-15, 18-19, 22-25, 27-28, 38 and 39 are amended, and Claim 40 is cancelled.

Therefore, Claims 1-19, 22-25, 27-30 and 38-39 are presently pending.

Amendment and cancellation of certain claims is not to be construed as a dedication to the public of any of the subject matter of the claims as previously presented.

No new matter is added.

Claim Rejection under 35 U.S.C § 102(a) of Claims 23 and 38

On page 2 of the Office Action, Claims 23 and 38 are rejected under 35 USC § 102(a) as being anticipated by Telefonaktiebolaget LM Ericsson (Pub. No: WO2004/016012 A1) ("Ericsson"). Applicants are traversing this rejection.

Claim Rejection under 35 U.S.C § 103(a) of Claims 24-25, 27-30

On page 5 of the Office Action, Claims 24-25 and 27-30 are rejected under 35 USC § 103(a) as being unpatentable over Ericsson in view of 3GPP TS25.346 V6.0.0 (2004-03) ("3GPP"). Applicants are traversing this rejection.

On page 6 of the Office Action, Claims 1, 2, 18, 19, 22, 39, and 40 were rejected under 35 USC § 103(a) as being unpatentable over Ericsson in view of Jung et al. (U.S. Pub. No. 2005/0213541). Applicants are traversing the rejection of claims 1, 2, 18, 19, 22, and 39. Claim 40 has been cancelled.

On page 14 of the Office Action, Claims 3-13 and 15-17 are rejected under 35 USC § 103(a) as being unpatentable over Ericsson further in view of 3GPP. Applicants are traversing the rejection of claims 3-13 and 15-17.

On page 18 of the Office Action, Claim 14 is rejected under 35 USC § 103(a) as being unpatentable over Ericsson in view of Jung et al. and further in view of Cooper (U.S. Pub. No. 2006/0194582). Applicants are traversing this rejection.

Claim Rejection under 35 U.S.C § 102(a) and 103(a) of Claims 1, 19, 22, 23, and 38

The application presently contains five independent claims, namely Claims 1, 19, 22, 23, and 38.

The independent claims have been amended to clarify that the invention provides a point to multipoint multicast service, under specific circumstances.

Claim 1, for example, now specifies:

> *determining whether to initiate a point to multipoint multicast service from a first base station of a first cell, the method comprising:*
>
> > *transmitting a message from a second base station in a second cell, wherein the first cell is a neighbour of the second cell, the message indicating, to user equipment positioned in the second cell, a list of cells that are neighbours to the second cell and are presently transmitting a multicast service*

Thus the base station in the second cell sends information to the user equipment about neighbouring cells that are presently transmitting a multicast service.

These changes are well supported by the specification. The examiner`s attention is directed particularly to paragraphs [0049] and [0061] to [0063]. Paragraph [0061] specifies, for example, "*List C contains a list of neighbouring cells presently transmitting a multicast service.*" Paragraph [0063] specifies *"...the UE may attempt to measure a signal measurement of a point-to-multipoint signal of neighbouring cells presently providing the multicast service (list C)."*

Claim 1 then goes on to specify:

> *in response to the user message, providing a point to multipoint multicast service in the first cell, when the first cell is listed in the list of at least one neighbouring cell, and a point to multipoint multicast service is in use in the second cell.*

Paragraph [0049] describes a situation in which two neighbouring cells 101 and 103 initiate a point-to-multipoint link in response to a request from a UE 111. See also references 101, 103, and 111 on figure 1 of the Application.

The examiner`s attention is also directed to paragraphs [0006], [0007], and [0027] for an explanation of the point to multipoint multicast service.

The provision of a point to multipoint multicast service may provide a user equipment with the opportunity of combining signals from two or more base stations in two or more cells. Once again, the examiner`s attention is directed to the application, particularly paragraphs [0029]-[0041]. Two corresponding potential advantages, higher quality of service and lower power usage, are discussed in paragraph [0037]. A potential advantage for continuity of multicast service for a mobile moving between cells is explained in paragraph [0038].

Independent claims 19, 22, 23, and 38 have been amended to specify the transmission of a message to the UE that contains a list of neighbouring cells that are presently transmitting a multicast service.

Turning now to Ericsson, it is clear that Ericsson considers a different issue to that described above. Ericsson has the twin aims of minimizing the number of "service areas" in which a broadcast service is provided, and minimizing the signaling overhead on the network. See paragraph [0005] and the first two sentences in paragraph [0017] of Ericsson. See also paragraph [0012] of Ericsson.

The solution chosen in Ericsson is to define a zone 14, which comprises two or more service areas 10. See figure 1 of Ericsson. At least one service area 10 is a "controlling" service area for the zone. See paragraph [0009] of Ericsson. A service area may correspond to a cell of a cellular network. According to Ericsson, if a mobile subscriber in the "controlling" area 10 of a zone 14 requires a broadcast service, then *all* the service areas in that zone receive the broadcast. Throughout most of Ericsson, the zones and controlling areas are predefined and do not vary. A system of registration flags acts to withdraw the broadcast service from services areas in which it is no longer needed, thereby minimizing the resources needed to broadcast.

Paragraphs [0049]-[0053] of Ericsson describe a situation where the zones are not fixed. In addition, the broadcast signal may be a multicast service. As stated in paragraph [0049], the zones may be shaped "dynamically." Paragraph [0054] suggests initiating a broadcast service only in service areas that belong to the active set of a particular mobile station. The active set may be those service areas from which the particular mobile could receive a useable signal strength. Paragraph [0052] suggests a default zone comprising all the neighbours of a particular zone.

The arrangement of Ericsson, in the variant with dynamic zones or the default zone described in the preceding paragraph, arranges for a broadcast signal that may be a multicast service. However, Ericsson does *not* decide between a point to multipoint multicast signal and a point to point multicast signal, as specified for example in Claim 1.

The choice of implementing a point to multipoint service in two neighbouring cells, as specified in Claim 1 under certain circumstances, offers the advantages described above with reference to paragraphs [0037]-[0038]. However, retaining a point to point multicast signal in some of the neighbouring cells, and in all of the neighbouring cells under some circumstances, may offer a further reduction in possible resource use, including power consumption.

The "*list of cells that are neighbours to the second cell and are presently transmitting a multicast service*" in Claim 1 may provide the advantage to the user equipment that it needs to carry out fewer measurements of signal strength. This would save time in reaching decisions about providing a point to multipoint service. It would also utilize existing information that may be known to the network for individual base stations. However, collating this information into a list for the particular cells that are neighbours to the second cell, and providing the list to the UE, may lead to advantages that the prior art is unable to provide.

Accordingly, we note with all due respect that Ericsson fails to describe each and all of the limitations of independent claim 1 and hence cannot be fairly held to anticipate Claim 1.

Claims 18, 22, 23, and 38 each specify steps analogous to those described above in connection with Claim 1. For this reason, Ericsson fails to describe each and all of the limitations of independent Claims 18, 22, 23, and 38.

Furthermore, Jung, 3GPP, and Cooper similarly fail to disclose the features or steps that show the method steps of Claims 18, 22, 23, and 38 that are not known from Ericcson.

Concerning Jung:

Jung describes a system where user equipment may receive either a point to multipoint multicast service or a point to point multicast service. See in particular paragraphs [0026] to [0029] of Jung.

Jung more particularly describes a decision between using either a point to multipoint multicast service or a point to point multicast service. This decision is based on the result of a count. The final sentence of paragraph [0026] of Jung makes clear that the count is of *"the number of terminals...within a particular cell*." This emphasis with respect to the particular cell is repeated in paragraph [0028] (see the phrase "corresponding cell" in line 8 of paragraph [0028]).

It is clear that the arrangement of Jung evaluates whether there are enough users in a cell to justify use of a point to multipoint multicast service in that cell. There is no suggestion, however, of basing this decision for a particular cell on information about *other* cells that might benefit from the availability of a point to multipoint multicast signal in the particular cell as per the claims of the present application. Other cells are not of relevance to the decision that is taken when employing Jung's teachings. The arrangement of Jung also does not address the problem of allowing a user equipment to employ signal combining, or to consider the advantages that may be achieved by implementing such a system.

In conclusion, neither Ericsson alone, nor a combination of Ericsson with Jung, 3GPP, or Cooper, leads to the claimed arrangement regardless of how obvious or unobvious any such combination might be.

The dependent claims

Claims 2-18, 24, 25, 27-30, and 38-39 are ultimately dependent upon one of the independent claims shown above to be allowable. While the applicant believes that other arguments are available to highlight the allowable subject matter presented in various ones of these dependent claims, the applicant also believes that the comments set forth herein regarding

allowability of the independent claims are sufficiently compelling to warrant present exclusion of such additional points for the sake of brevity and expedited consideration.

For at least these reasons, the prior art references, alone or combined, do not teach or suggest all the claim limitations for the claims on file. Accordingly, Applicant respectfully requests reconsideration and allowance of Claims 1-19, 22-25, 27-30, and 38-39.

CONCLUSION

The case is believed to be in condition for allowance and notice to such effect is respectfully requested. If the Examiner should have any other points of concern, the Examiner is expressly invited to contact the undersigned by telephone to discuss those concerns and to seek an amicable resolution.

Respectfully submitted,

FITCH, EVEN, TABIN & FLANNERY

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